

# Notice of Allowability

Application No.

10/806,382

Examiner

Mark Kopec

Applicant(s)

ALBERS ET AL.

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to app. filed 3/23/04.
2. ☒ The allowed claim(s) is/are 11-20.
3. ☒ The drawings filed on 23 March 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other copy of search report.

  
Mark Kopec  
Primary Examiner

This application is a CON of PCT/FI02/00757 (filed 9/23/02, now WO03/028039.

The preliminary amendment filed 3/23/04 is entered. Claims 11-20 are pending.

The references cited in the Search Report mailed 8/1/03 (PCT/FI02/00757) have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO-1449 form, must be filed within ONE MONTH of the mailing date of this communication. NO EXTENSION OF TIME WILL BE GRANTED UNDER EITHER 37 CFR 1.136(a) OR (b) to comply with this requirement.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The following is an examiner's statement of reasons for allowance:

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Alberts (5,556,524) discloses electron-conducting molecular preparation designed to act as a conductor by receiving an electron at its one end and conducting the electron along its molecular structure to its other end. The molecular preparations can be incorporated in a substantially insulating membrane to act as conductors between an electroactive species and an electrode in diagnostic determinations (Abstract; Col 4, lines 1-45; Col 7, lines 50-55).

Mino et al (5,116,638) discloses electrical and optical materials, and particularly to organic electro-conductive thin films exhibiting electro-conductivity and non-linear optical effect, and to process for the production thereof. Further, the above properties and effects depend predominantly on the orientation of molecules constituting the films, and therefore the present invention is for control of the orientation (Abstract; figures). The thin films and the process of the present invention are further characterized chemical bondings are formed between the mutual organic compound molecules having a straight-chain hydrocarbon group, and between the substrate surface and the organic compound molecules having a straight-chain hydrocarbon group, said chemical bondings between the mutual organic compound molecules having a straight-chain hydrocarbon group being super-long conjugated bondings by mutual

functional groups formed in the organic compound molecules having a straight-chain hydrocarbon group 9Col 1, lines 55-65).

The references do not disclose or fairly suggest the instantly recited thermoplastic elastomer composites comprising elastomer matrix and metal-containing conductive particles, each of said particles at least partially coated with the claimed self-assembled monomolecular layer requiring neutral end group capable of forming a stable complex and alkyl group (at least two carbon atoms).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the

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organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mark Kopec  
Primary Examiner  
Art Unit 1751

MK  
November 27, 2004

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 02/00757

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H01B 1/22, C08K 9/04, C08K 3/08, C08L 21/00  
According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, CAPLUS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4961879 A (PAUL Y.Y. MOY ET AL), 9 October 1990 (09.10.90)	1-10
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P,A	WO 0237507 A1 (GENERAL ELECTRIC COMPANY), 10 May 2002 (10.05.02)	1-10
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A	EP 0144849 A2 (NISSAN CHEMICAL INDUSTRIES LTD.), 19 June 1985 (19.06.85)	1-10
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

19 December 2002

Date of mailing of the international search report

08-01-2003

Name and mailing address of the ISA/

Swedish Patent Office

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Authorized officer

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 02/00757

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Langmuir, vol. 14, 1998, William A. Hayes et al: "Nanometer-Scale Patterning of Surfaces Using Self-Assembly Chemistry. 3. Template-Directed Growth of Polymer Nanostructures on Organothiol Self-Assembled Mixed Monolayers", pages 1099-1102  --	1-10
P,A	Langmuir, vol. 18, 2002, Chun-Guey Wu et al: "Formation and Electrochemical Property of Pyrrole-Terminated SAMs and the Effect of the SAMs on the Physicochemical Properties of Polypyrrole Films Electrochemically Deposited over Them, pages 7473-7481  -- -----  <i>Maka 11/27/04</i>	1-10

INTERNATIONAL SEARCH REPORT  
Information on patent family members

01/12/02

International application No.

PCT/FI 02/00757

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
US	4961879	A	09/10/90	CA	1337537 A	07/11/95
				EP	0440648 A	14/08/91
				JP	3505649 T	05/12/91
				US	5173519 A	22/12/92
				US	5252255 A	12/10/93
				WO	8912306 A	14/12/89
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WO	0237507	A1	10/05/02	AU	4585902 A	15/05/02
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EP	0144849	A2	19/06/85	DE	3466118 D	00/00/00
				JP	1349266 C	28/11/86
				JP	60118745 A	26/06/85
				JP	61014174 B	17/04/86
				US	4559166 A	17/12/85
				JP	1349267 C	28/11/86
				JP	60118746 A	26/06/85
				JP	61014175 B	17/04/86
				JP	1349268 C	28/11/86
				JP	60118747 A	26/06/85
				JP	61014176 B	17/04/86
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